

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) ~~Method~~ A method for authenticating a first unit to a second unit, said method comprising the steps of:
 - a) exchanging authentication data between said first unit and said second unit, said authentication data being retrieved from an ~~authorisation~~ authorization list comprising a list identifier, ~~i~~
 - 5 b) checking the presence of the first unit on the authorization list; and
 - ~~b)c) checking the authenticity validity of the authorisation authorization list and the origin of the authentication data from a~~
 - 10 valid authorisation list using the list identifier received from the first unit and a list identifier stored in the second unit.

2. (Currently Amended) ~~Method according to~~ The method as claimed in claim 1, wherein authentication of said first unit is terminated if either of said ~~step of checking steps~~ fails.

3. (Currently Amended) ~~Method according to~~ The method as claimed in claim 1, wherein said first unit comprises an application unit including an application and said second unit comprises a security unit.

4. (Currently Amended) ~~Method according to~~ The method as
claimed in claim 3, wherein said ~~authorisation~~ authorization list
comprises a certified application list comprising information about
~~authorised~~ authorized applications.

5. (Currently Amended) ~~Method according to~~ The method as
claimed in claim 4,

_____ wherein in said step a), a certified public key of said
application unit retrieved from said certified application list and
5 a list identifier of said certified application list is transmitted
from said application unit to said security unit, and
_____ wherein in said step ~~bc~~ c) said certified public key of said
application unit and said list identifier of said certified
application list is checked by said security unit.

6. (Currently Amended) ~~Method according to claim~~ The method as
claimed in claim 5, wherein said method further comprising
comprises the steps of:

b1) transmitting a certified public key of said security unit
5 from said security unit to said application unit, ; and
b2) checking said certified public key of said security unit
by said application unit against a certified security unit
revocation list.

7. (Currently Amended) ~~Method according to~~ The method as
claimed in claim 6, wherein said certified public keys are checked
by use of a public key of a certification unit provided by said
certification unit to said security unit and said application unit.

8. (Currently Amended) ~~Method according to~~ The method as
claimed in claim 5, wherein said certified application list is
provided and updated by a certification unit.

9. (Currently Amended) ~~Method according to~~ The method as
claimed in claim 1, wherein said list identifier is distributed
together with data carriers or from any of said first unit, second
unit or said certification unit.

10. (Currently Amended) ~~Method~~ A method for transmitting data
securely over a transmission channel from a second unit to a first
unit, said method comprising the steps of:

_____ ~~a method for authenticating~~ said first unit to said
5 second unit ~~according to~~ as claimed in claim 1, ~~further comprising~~
~~the steps of:~~
ed) encrypting data to be transmitted using an encryption key
by said second unit, ~~;~~ i and

de) transmitting said encryption key and the encrypted data
10 from said second unit to said first unit or determining said
encryption key by said first and said second unit.

11. (Currently Amended) ~~Method according to~~ The method as
claimed in claim 10, wherein said ~~authorisation~~ authorization list
is distributed together with said data to be transmitted, with data
carriers, with application units or applications.

12. (Currently Amended) ~~Data~~ A data transmission system for
transmitting data securely over a transmission channel comprising:
a) a first unit for transmitting authentication data from
said first unit to ~~said a~~ a second unit, said authentication data
5 being retrieved from an ~~authorisation~~ authorization list comprising
a list identifier;
b) a second unit for checking the authenticity of the
~~authorisation~~ authorization list and the origin of the
authentication data from a valid ~~authorisation~~ authorization list
10 and for transmitting said data over a transmission channel from
said second unit to said first unit.

13. (Currently Amended) ~~Data~~ The data transmission system
~~according to~~ as claimed in claim 12, wherein the second unit ~~is~~
provided comprises:

_____ means for encrypting data to be transmitted using an
5 encryption key, ~~—~~; and
_____ means for transmitting said encryption key and said
encrypted data from said second unit to said first unit or for
determining said encryption key by said first and said second unit.

14. (Currently Amended) ~~Data—~~The data transmission system
~~according to~~as claimed in claim 12, wherein said data transmission
system further comprising comprises:
_____ a certification unit for providing a public key of said
5 certification unit for checking said authentication data and for
providing and updating said ~~authorisation~~ authorization list.

15. (Currently Amended) ~~Data—~~The data transmission system
~~according to~~as claimed in claim 12, wherein said data transmission
system further comprising comprises:
_____ a computer comprising a reading unit for reading a data
5 carrier storing the data to be transmitted,
_____ wherein said first unit is part of said computer provided
for running an application, and
_____ wherein said second unit is part of said computer
connected to or arranged in the reading unit provided for
10 decrypting and re-encrypting data read from said data carrier.

16. (Currently Amended) ~~Data~~ A data transmission apparatus for transmitting data securely over a transmission channel comprising:

a) a first unit for transmitting authentication data from said first unit to said second unit, said authentication data being
5 retrieved from an ~~authorisation~~ authorization list comprising a list identifier, ~~—~~ ; and

b) a second unit for checking the authenticity of the ~~authorisation~~ authorization list and the origin of the authentication data from a valid ~~authorisation~~ authorization list,

10 for encrypting data to be transmitted using an encryption key, and for transmitting said encryption key and said encrypted data from said second unit to said first unit or for determining an encryption key by said first and said second unit.